

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Stanley C. Spooner (Reg. No. 27393) on 12 June 2008.

3. The claims had been amended as *follows*:
 1. (currently amended) A method of processing data with execution of data processing operations under control of either a first operating system or a second operating system, said method comprising the steps of:
 - receiving an interrupt for suspending execution of data processing operations;
 - in response to said interrupt, starting a stub interrupt handling routine executing under control of said first operating system;
 - as commanded by said stub interrupt handling routine, suspending execution of said stub interrupt handling routine and starting a main interrupt handling routine executing under control of said second operating system;
 - executing said main interrupt handling routine under control of said second operating system to handle said interrupt;

as commanded by said main interrupt handling routine, resuming execution of said stub interrupt handling routine under control of said first operating system; and

as commanded by said stub interrupt handling routine, resuming said data processing operations, wherein

if said main interrupt handling routine is interrupted by a further interrupt which when handled leaves processing under control of said first operating system, then said first operating system detects that said stub interrupt handling routine has been interrupted and resumes said stub interrupt handling so as to trigger resumption of said main interrupt handling routine.

2. (original) A method as claimed in claim 1, wherein when said interrupt occurs while data processing under said first operating system is suspended following data processing operations under control of said first operating system executing a call instruction calling data processing operations under control of said second operating system, said stub interrupt handling routine appears to said first operating system to be handling an interrupt which occurred during execution of said call instruction.

3. (original) A method as claimed in claim 2, wherein said resumption of data processing operations as commanded by said stub interrupt handling routine is performed by re-executing said call instruction.

4. (original) A method as claimed in claim 2, wherein said call instruction is a software interrupt instruction.

5. (original) A method as claimed in claim 1, wherein said second operating system executes in a secure domain and said first operating system executes in a non-

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secure domain, wherein a data processing operations executing in said secure domain have access to secure data which is not accessible to a data processing operating executing in said non-secure domain.

6. (original) A method as claimed in claim 1, wherein switches between processing under control of said first operating system and processing under control of said second operating system take place via a monitor mode of operation executing a monitor mode program.

7. (currently amended) Apparatus having a processor for processing data with execution of data processing operations under control of either a first operating system or a second operating system, said apparatus comprising :

receiving circuitry for receiving an interrupt to suspend execution of data processing operations;

handling circuitry for starting a stub interrupt handling routine executing under control of said first operating system in response to said interrupt;

suspending circuitry for suspending execution of said stub interrupt handling routine as commanded by said stub interrupt handling routine, and starting a main interrupt handling routine executing under control of said second operating system;

execution circuitry for executing said main interrupt handling routine under control of said second operating system to handle said interrupt;

resumption circuitry for resuming execution of said stub interrupt handling routine under control of said first operating system as commanded by said main interrupt handling routine; and

resumption circuitry for resuming said data processing operations, as commanded by said stub interrupt handling routine, wherein

if said main interrupt handling routine is interrupted by a further interrupt which when handled leaves processing under control of said first operating system, then said first operating system detects that said stub interrupt handling routine has been interrupted and resumes said stub interrupt handling so as to trigger resumption of said main interrupt handling routine.

8. (original) Apparatus as claimed in claim 7, wherein when said interrupt occurs while data processing under said first operating system is suspended following data processing operations under control of said first operating system executing a call instruction calling data processing operations under control of said second operating system, said stub interrupt handling routine appears to said first operating system to be handling an interrupt which occurred during execution of said call instruction.

9. (currently amended) Apparatus as claimed in claim 8, wherein said resumption of data processing operations as commanded by said stub interrupt handling routine started by said handling circuitry is performed by re-executing said call instruction.

10. (original) Apparatus as claimed in claim 8, wherein said call instruction is a software interrupt instruction.

11. (original) Apparatus as claimed in claim 7, wherein said second operating system executes in a secure domain and said first operating system executes in a non-secure domain, wherein a data processing operations executing in said secure domain

have access to secure data which is not accessible to a data processing operating executing in said non-secure domain.

12. (original) Apparatus as claimed in claim 7, wherein switches between processing under control of said first operating system and processing under control of said second operating system take place via a monitor mode of operation executing a monitor mode program.

13. (currently amended) A computer program product stored on a computer-readable storage medium, said computer program product arranged to control a data processing apparatus in accordance with a method as claimed in claim 1.

Allowable Subject Matter

4. Claims **1-13** are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exr. Abdou Seye whose telephone number is (571) 270-1062. The examiner can normally be reached Monday through Friday from 7:30 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, contact the examiner's supervisor, An Meng at (571) 272-3756. The fax phone number for formal or official faxes to Technology Center 3600 is (571) 273-8300. Draft or informal faxes, which will not be entered in the application, may be submitted directly to the examiner at (571) 273-6722.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-3600.

AKS

July 1, 2008

/Li B. Zhen/
Primary Examiner, Art Unit 2194